Pile Driver Lab Conclusion

Period 3A

10/5/12

After investigating the relationship between drop height of a weight and the crush amount of a can we found out that the higher you drop the weight from the more it will crush the can. When we dropped the weight from 1.0 meter the can was crushed 4 cm, but when we dropped it from 0.5 meters the can was only crushed 2.3 cm. When we graphed our data we saw a positive correlation with a slope of 4 cm/m. This means that for every 1 meter that I raise the weight the can will be crushed another 4 cm. We found that the higher you raise the weight the more GPE it will have, when we release the weight the GPE turns into Kinetic Energy and Heat. At the bottom the can gets crushed and the KE turns into sound and heat.

Pile Driver Conclustion

Period 4A

10/5/12

We did an investigation to determine how the drop height of a weight will effect the amount a can gets crushed. We found out that the higher you drop the weight from, the more it will crush the can. When we dropped the weight from 0.5 meters the can got crushed 2.3cm, but when we dropped from 1.5 meters the can got crushed 5.1 cm. When we graphed our data we saw a positive correlation between the drop height and the crush amount, with a slope of 4 cm/m. This slope tells me that for every 1 meter of drop height the can will be crushed 4 cm more. We also found out that the GPE that the weight started with turns into KE and Heat as it falls down the tube. Then the KE turns into sound and heat when it hits the can.

Pile Driver Lab Conclusion

Period 3B

10/8/12

We did an investigation to determine the relationship between the drop height of a weight and how much it crushes a can. We found out that the higher you drop it from the more it will crush the can. Our data shows that when you drop the weight from 0.5 m it will crush the can 4 cm , but when you drop it from 1.0 m it will crush the can 6 cm. When we graphed our data we saw a positive slope which shows the data is increasing. The slope of the graph was 8.4 cm/m. This slope tells us that for every 1 meter of drop height the can gets crushed another 8.4 cm. It takes energy to crush a can. The weight started with GPE which turned into KE and heat as it fell and when it got transferred to the can the energy became sound and heat.

Pile Driver Lab Conclustion

Period 4B

10/8/12

We did an experiment to determine what the relationship is between the drop height of a weight and the crush amount of a can. We found out that the higher the weight is dropped from the more the can will be crushed. Our data shows that when we dropped the weight from 0.5 m the can was crushed only 6.5 cm, but when we dropped it from 1.5 m the can was crushed 8.5cm. When we graphed our data the best fit line went up and had a positive slope of 6 cm/m. This slope tells us that for every 1 meter of drop height the crush amount will go up by 6 cm. It takes energy to crush the can. The weight got it’s energy from me. The weight started with GPE and as it fell the GPE turned into KE and heat. When the weight hits the can the KE turns into sound and heat.